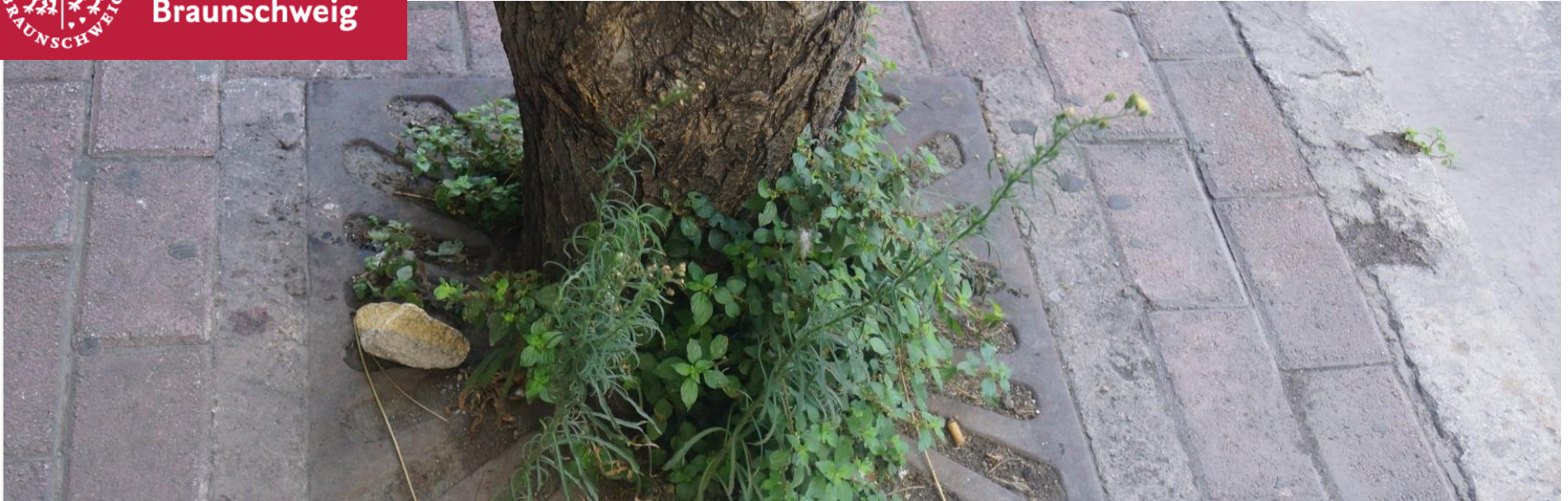




Technische
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Habitats and association of *Parietaria judaica* in Athens (Greece)

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Parietaria judaica

Parietaria judaica is a very common species in the Mediterranean area. Its variability is probably due to the hybridogenous origin: possibly an allotetraploid of *Parietaria officinalis* and *Parietaria cretica* (RUNEMARK unpubl. in CARLSTRÖM 1997).

The species is considered as one of the main causes of pollinosis in Southern Europe because of its aggressive pollen and the long time period of flowering during the year.

Parietaria judaica is common in old towns and villages in South and Southwest Europe. The species is an archaeophyte along the river Rhine since Roman times; nowadays it is spreading as container weed to Central Europe.

Phytosociology of *Parietaria judaica*

From a phytosociological point of view *Parietaria judaica* is considered as characteristic species of the class Asplenietea or even of a separate class Parietarietea. The communities of both classes are growing on rocks and walls.

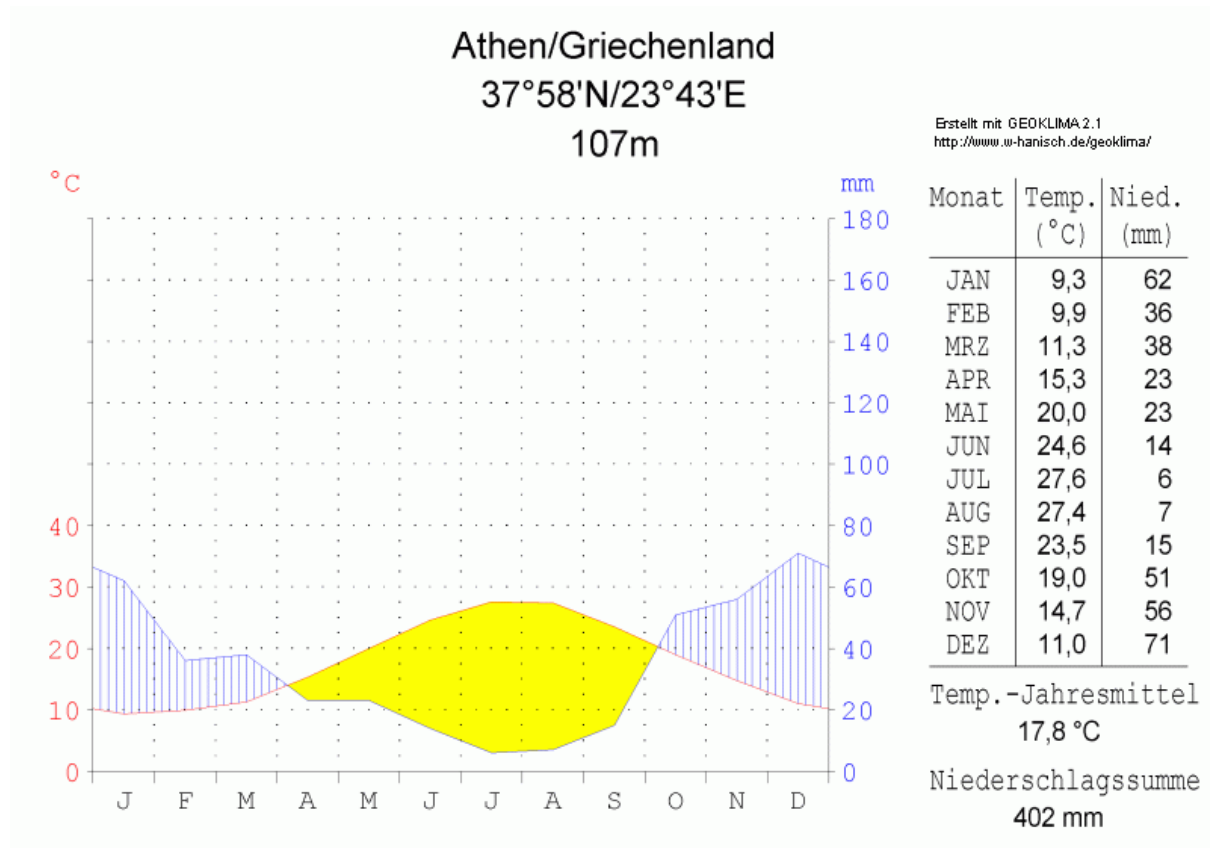
The largest occurrence of *Parietaria judaica* however is to be found at the feet of walls, houses, flowerbeds and orchards. It belongs to scio- and nitrophilous plant communities but not to the wall vegetation.

These stands with dominating *Parietaria judaica* are mostly overlooked but widely distributed (BRANDES 1998).

Only BRULLO & MARCENO (1985) described the vegetation of shady places on soils rich in nutrients with *Parietaria judaica* and set up the order Urtico-Scrophularietalia peregrinae.

Situation in Athens

Athens is located in Central Greece with a hot-summer Mediterranean climate (Köppen classification: Csa). The Athens Urban Area is densely built up and covers 412 km² with a population of about 3.090.000 people.



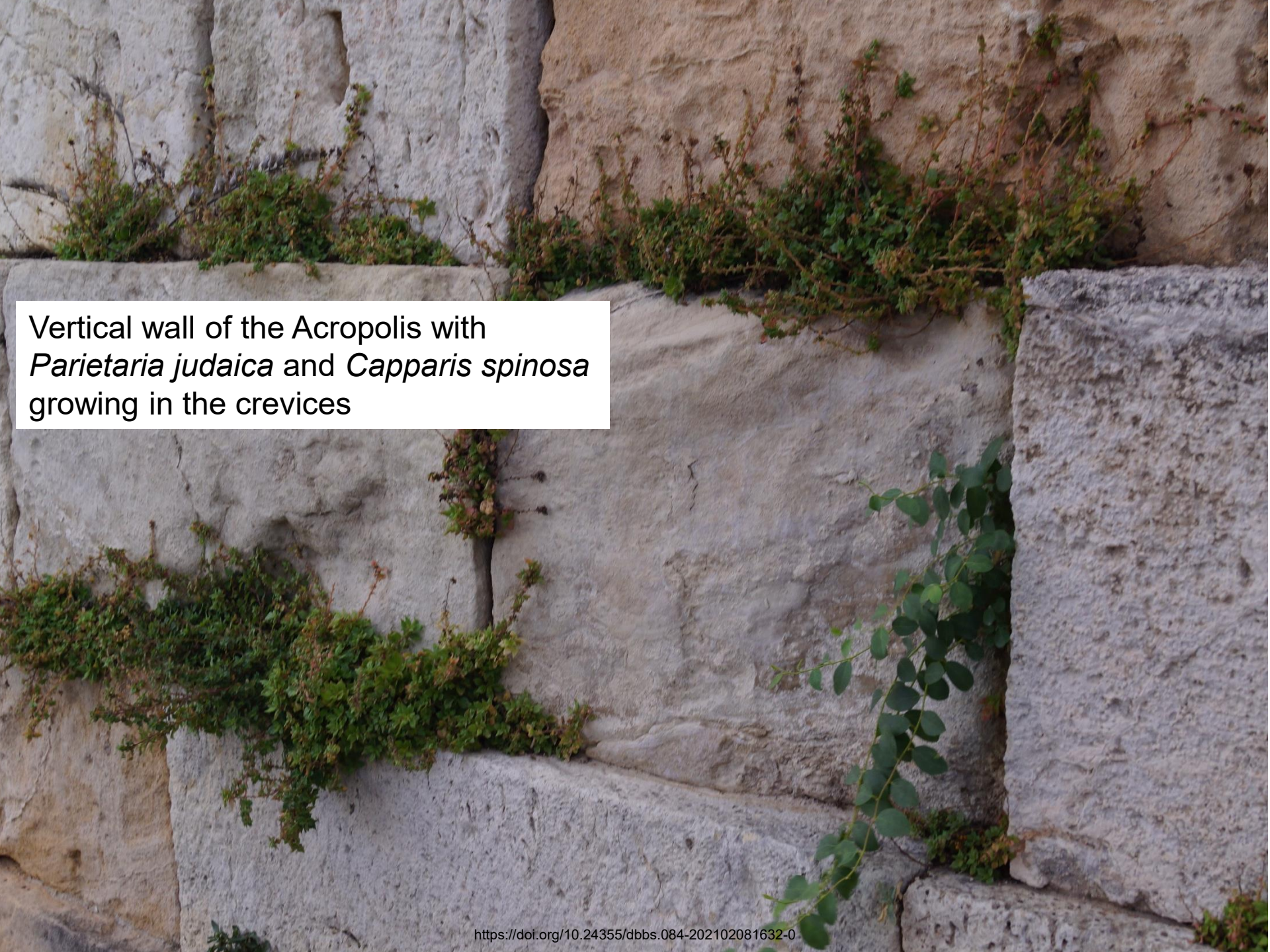
https://commons.wikimedia.org/wiki/File:Athens_climate_diagram.png

Habitats and association of *Parietaria judaica* in Athens

In autumn 2017 stands of *Parietaria judaica* in inner districts of Athens were studied with regard to microhabitats and association.

Fairly rare we found *Parietaria judaica* growing in cracks of historical walls sparsely associated with *Capparis spinosa*, *Hyoscyamus albus*, *Matthiola incana*, *Micromeria graeca*, *Nicotiana glauca*, *Phagnolon rupestre* subsp. *graecum*, *Scrophularia* cf. *heterophylla*.

Most of such stands are without *Parietaria judaica*.

A photograph of a vertical stone wall made of large, light-colored blocks. Several plants are growing in the crevices and along the surface of the wall. The plants are green and have small, fleshy leaves, characteristic of *Parietaria judaica* and *Capparis spinosa*. One plant is growing in a crevice on the left, another in a crevice on the right, and a third in a crevice in the center. The wall is made of large, rectangular stone blocks with visible mortar joints. The plants are growing in the crevices and along the surface of the wall.

Vertical wall of the Acropolis with
Parietaria judaica and *Capparis spinosa*
growing in the crevices



Parietaria judaica at the wall of the
canalised river Eridanos

***Parietaria judaica* in herbaceous weed vegetation**

Most weedy stands with pellitory-of-the-wall are small sized, the species association is often fragmentary but *Parietaria judaica* dominates often.

Frequent companions in nitrophilous and sciophilous vegetation are:

Amaranthus blitum, *Amaranthus deflexus*, *Amaranthus viridis*, *Aster squamatus*, *Ballota acetabulosa*, *Broussonetia papyrifera*, *Calendula arvensis*, *Celtis* cf. *australis*, *Chamaesyce nutans*, *Chenopodium murale*, *Chenopodium opulifolium*, *Commelina communis*, *Cymbalaria muralis*, *Cyperus rotundus*, *Eleusine indica*, *Ficus carica*, *Heliotropium euopaeum*, *Medicago sativa*, *Mirabilis jalapa*, *Nicotiana glauca*, *Paspalum dilatatum*, *Plantago major*, *Reichardia picroides*, *Scrophularia* cf. *heterophylla*, *Setaria aedhaerens*, *Sisymbrium orientale*, *Solanum elaeagnifolium*, *Taraxacum* spec., *Tribulus terrestris*, *Urtica* spec., *Verbascum sinuatum*, *Verbascum undulatum*.



Parietaria judaica and *Conyza bonariensis* on a tree grate („Baumscheibe“)

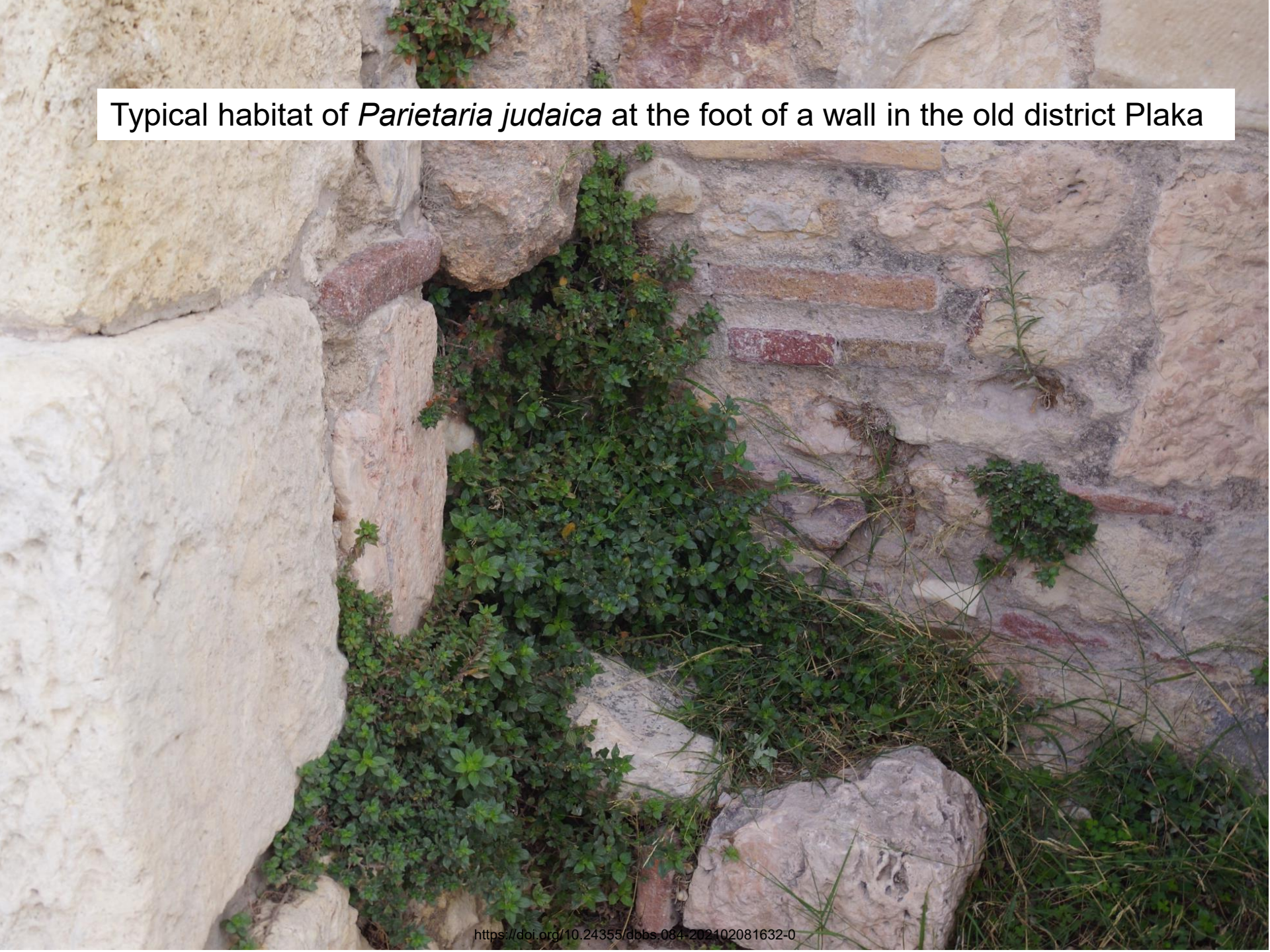


Parietaria judaica and *Mirabilis jalapa* in a small gully in the Plaka district



Gravelly microhabitat in front of a platform (metro station Thissio)

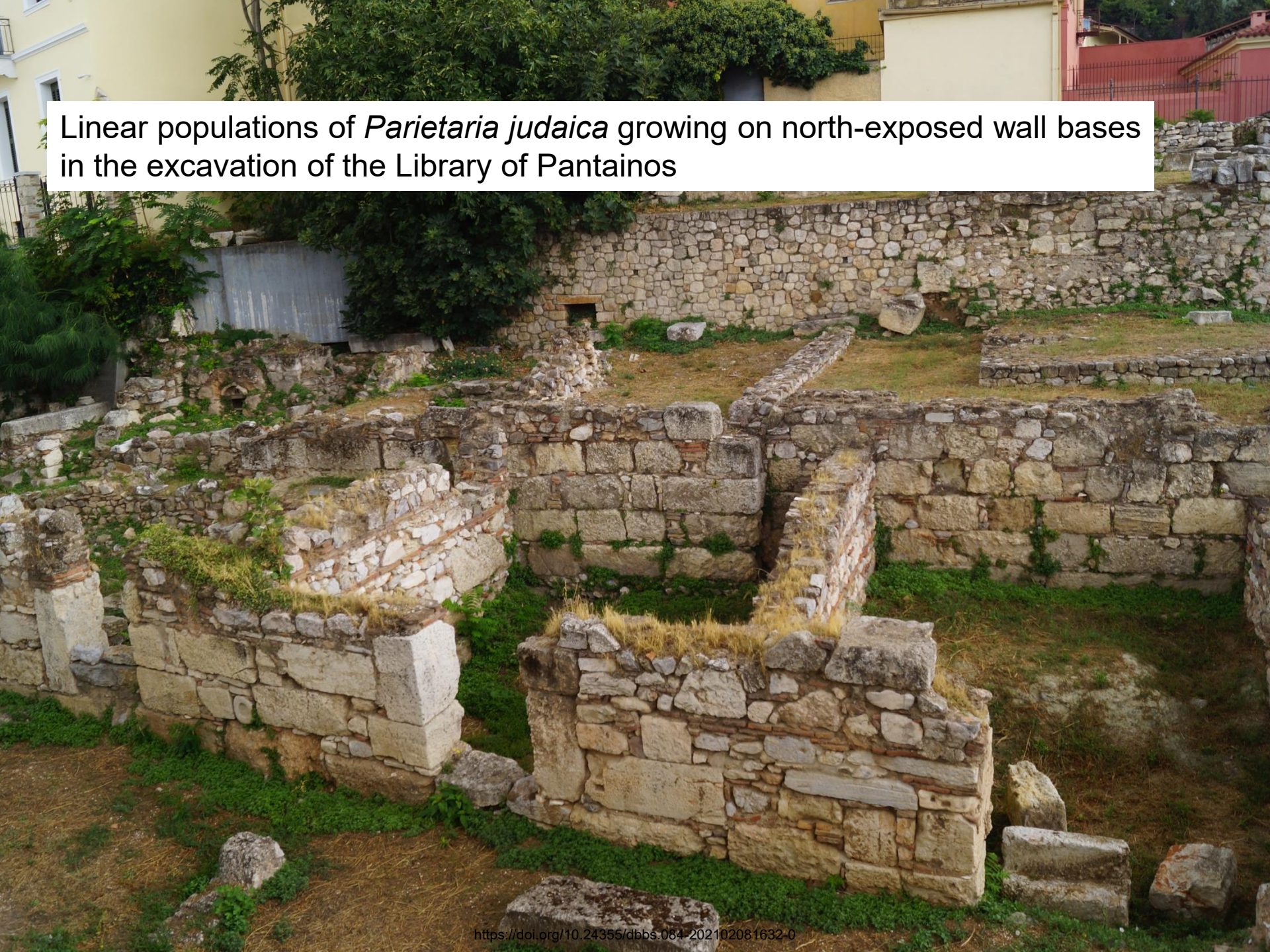
Typical habitat of *Parietaria judaica* at the foot of a wall in the old district Plaka



Parietaria judaica, *Ficus carica*, *Ailanthus altissima* and *Mirabilis jalapa* at the feet of walls in an archaeological excavation (Library of Pantainos)



Linear populations of *Parietaria judaica* growing on north-exposed wall bases in the excavation of the Library of Pantainos





Parietaria judaica in the Roman Agora



Parietaria judaica at the base of
an house near the station Thissio



Parietaria judaica and *Sisymbrium orientale* (Plaka)



Entrance of an disused house in the Ploutarhou (south of Lykavittos) with *Parietaria judaica* and *Ailanthus altissima*



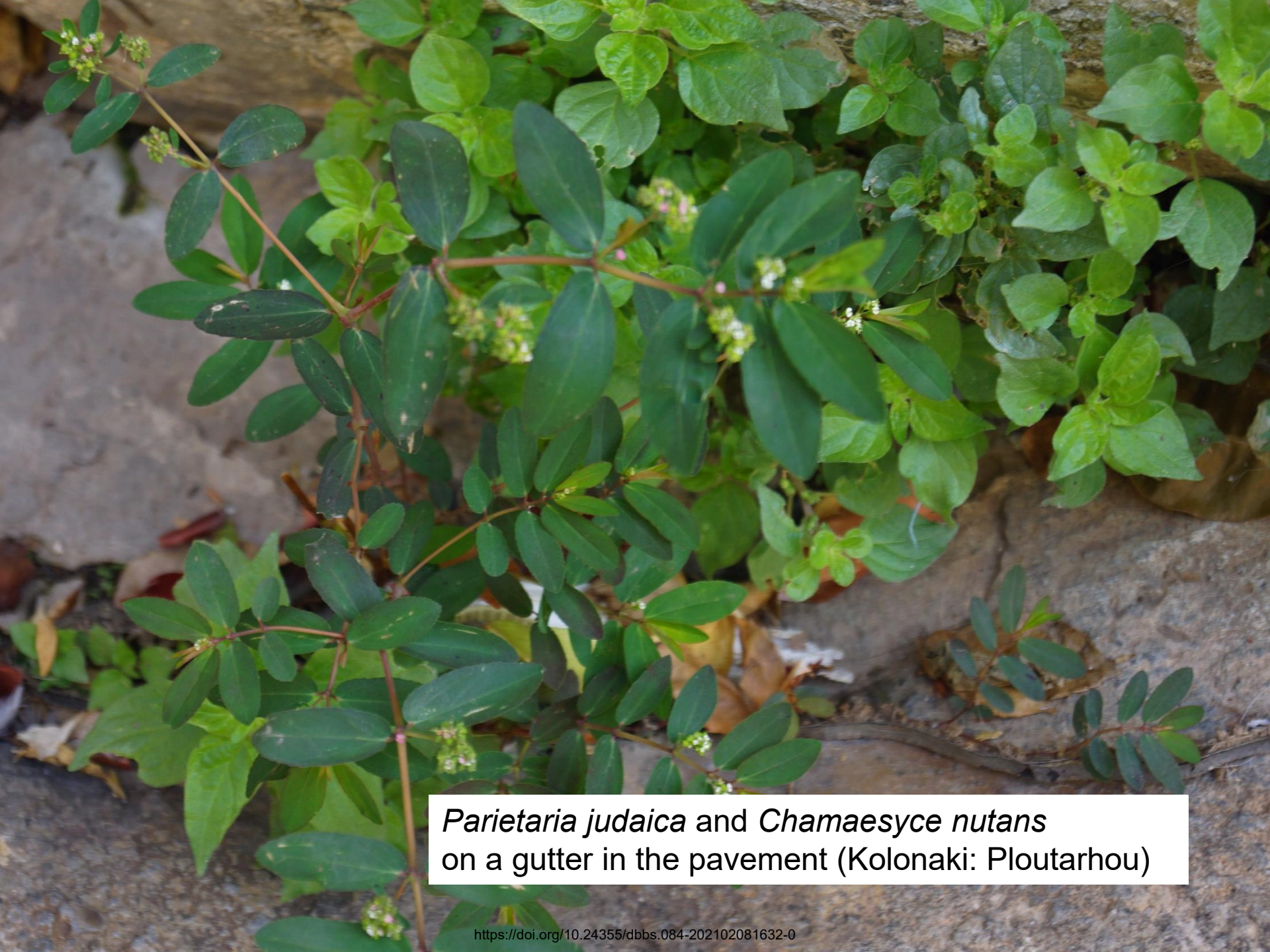
Disused courtyard near the Thissio station with *Parietaria judaica*, *Ailanthus altissima* and some grasses (e.g. *Piptatherum miliaceum*)



Parietaria judaica at the antique city wall
(Kerameikos)



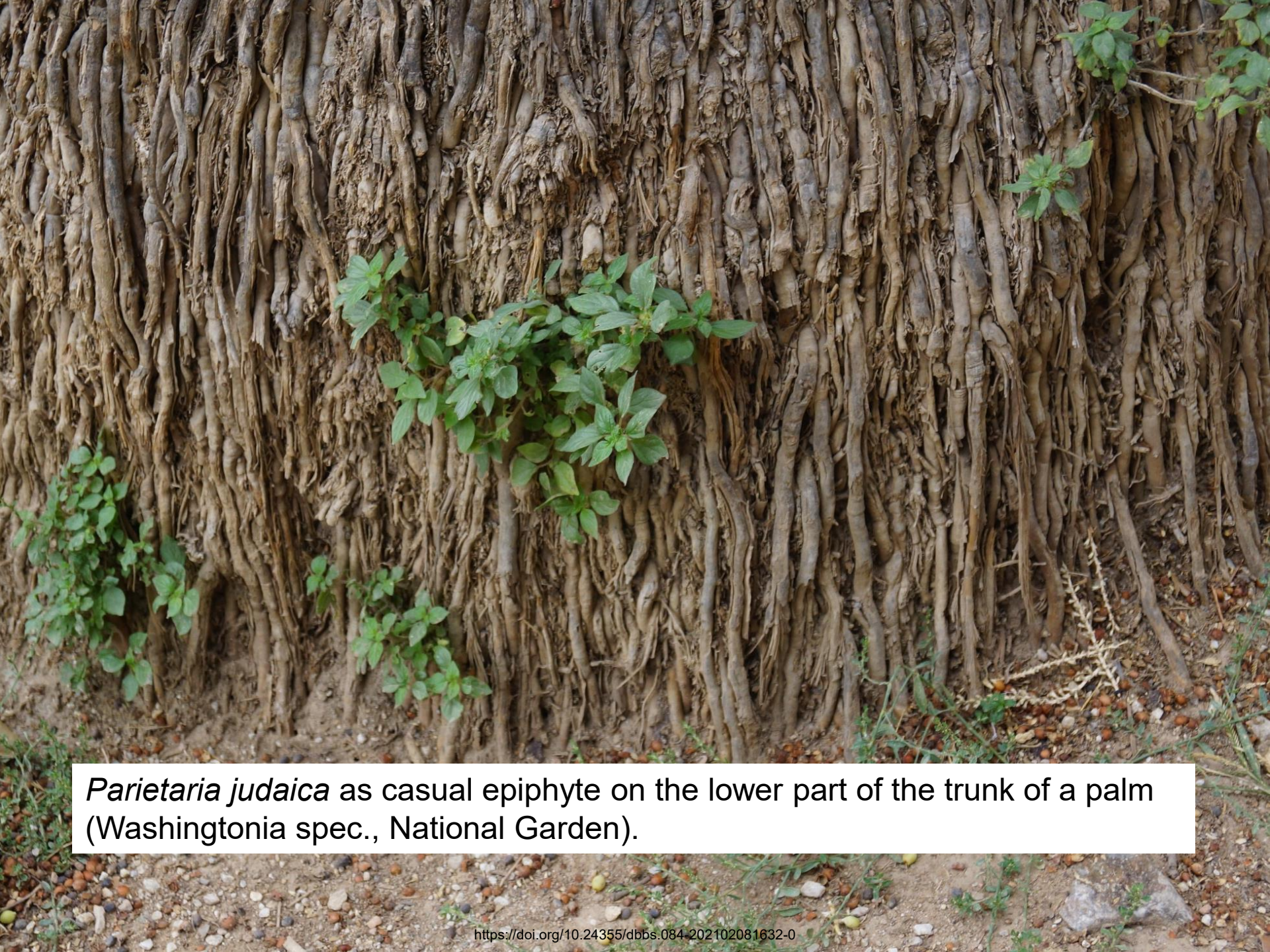
Parietaria judaica growing at the fence of a front yard



Parietaria judaica and *Chamaesyce nutans*
on a gutter in the pavement (Kolonaki: Ploutarhou)



Parietaria judaica with *Ficus carica*, *Digitaria sanguinalis* und *Ailanthus altissima* on both sides of a gully in the Plaka district



Parietaria judaica as casual epiphyte on the lower part of the trunk of a palm (Washingtonia spec., National Garden).



Parietaria judaica and *Broussonetia papyrifera* in shaded and well-watered habitats (National Garden Athens)

Main weed aspect in October in gardens





Parietaria judaica in the neighborhood of an irrigation canal
(National Garden Athens)

Cited literature and address of the author

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Brullo, S., C. Marcenó (1985): Contributo alla conoscenza della vegetazione nitrofila della Sicilia. – *Colloques phytosociologiques*, 12: 23-148.

Carlström, A. (1997): *Parietaria* L. - In: Strid, A. & K. Tan (eds.): *Flora Hellenica*. Vol 1. Königstein: Koeltz 1997, p. 59.

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